



## Complete Summary

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### GUIDELINE TITLE

Assessment and management of stage I to IV pressure ulcers.

### BIBLIOGRAPHIC SOURCE(S)

Registered Nurses Association of Ontario (RNAO). Assessment and management of stage I to IV pressure ulcers. Toronto (ON): Registered Nurses Association of Ontario (RNAO); 2002 Aug. 104 p. [70 references]

## COMPLETE SUMMARY CONTENT

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## SCOPE

### DISEASE/CONDITION(S)

Stage I to IV pressure ulcers

### GUIDELINE CATEGORY

Evaluation

Management

Risk Assessment

### CLINICAL SPECIALTY

Dermatology

Family Practice

Geriatrics

Nursing

Nutrition

Physical Medicine and Rehabilitation

### INTENDED USERS

Advanced Practice Nurses  
Nurses

#### GUIDELINE OBJECTIVE(S)

To present nursing best practice guidelines on the assessment and management of stage I to IV pressure ulcers

#### TARGET POPULATION

Patients in Canada from all areas of clinical practice with or at risk for developing pressure ulcers

#### INTERVENTIONS AND PRACTICES CONSIDERED

##### Evaluation/Risk Assessment

1. History and physical examination
2. Assessment of psychosocial factors
3. Assessment of pressure ulcers
4. Assessment of risk for developing additional pressure ulcers or worsening of existing pressure ulcers ("Braden Scale for Predicting Pressure Sore Risk")
5. Assessment of pain related to pressure ulcers
6. Vascular assessment (e.g., Ankle/Brachial Pressure Index, Toe Pressure)
7. Nutritional assessment

##### Management

1. Management of nutritional needs, including use of supplements and/or tube feeding
2. Positioning
3. Use of static and dynamic support surfaces (e.g., special beds, mattresses, seat cushions that reduce pressure while sitting or lying)
4. Referrals to interdisciplinary team members, as indicated
5. Debridement of pressure ulcers
6. Pain management
7. Wound cleansing (e.g., use of normal saline, Ringer's lactate, sterile water or non-cytotoxic wound cleaners; antiseptics are not recommended)
8. Dressings (moisture-retentive versus dry)
9. Ongoing evaluations of pressure ulcers
10. Adjunctive therapies for chronic pressure ulcers (e.g., electrical stimulation, vacuum assisted closure and normothermic therapies, therapeutic ultrasound, ultraviolet light, pulsed electromagnetic fields, growth factors and skin equivalents)
11. Measures to manage colonization and infection (wound cleansing, systemic antibiotics, debridement, protection of wound from sources of contamination)
12. Operative repair of pressure ulcers
13. Discharge/transfer of care arrangements
14. Educational, organizational and policy approaches and strategies

#### MAJOR OUTCOMES CONSIDERED

- Validity of assessment tools
- Incidence and severity of pressure ulcers
- Effectiveness of management interventions at promoting wound healing and preventing skin breakdown

## METHODOLOGY

### METHODS USED TO COLLECT/SELECT EVIDENCE

#### Searches of Electronic Databases

### DESCRIPTION OF METHODS USED TO COLLECT/SELECT THE EVIDENCE

Guideline developers conducted a systematic literature search in addition to a structured Internet search, which yielded a set of five clinical practice guidelines related to the assessment and management of pressure ulcers. A quality appraisal was conducted on these five guidelines using an adapted tool from Cluzeau et al. (1997). From this systematic evaluation, the following guidelines, and related updates, were identified to adapt and modify:

1. Agency for Health Care Policy and Research (AHCPR). (1994). Treatment of Pressure Ulcers. Clinical Practice Guideline, Number 15. AHCPR Publication Number 95-0652. Rockville, MD: Agency for Health Care Policy and Research, Public Health Service, U.S. Department of Health and Human Services.

#### Updates

Krasner, D. (1999). The AHCPR pressure ulcer infection control recommendations revisited. *Ostomy/Wound Management*, 45(1A Suppl.), 88S-91S.

Ovington, L. (1999). Dressings and adjunctive therapies. AHCPR guidelines revisited. *Ostomy/Wound Management*, 45(1A Suppl.), 94S-106S.

van Rijswijk, L. & Braden, B. (1999). Pressure ulcer patient and wound assessment: An AHCPR clinical practice guideline update. *Ostomy/Wound Management*, 45 (1A Suppl.), 56S-67S.

2. Compliance Network Physicians/Health Force Initiative (1999). Guidelines for the outpatient treatment of chronic wounds and burns. Berlin: Blackwell Science Ltd.
3. Clinical Resource Efficiency Support Team (CREST) (1998). Guidelines for the Prevention and Management of Pressure Sores. Belfast, Northern Ireland: CREST Secretariat.

### NUMBER OF SOURCE DOCUMENTS

Not stated

## METHODS USED TO ASSESS THE QUALITY AND STRENGTH OF THE EVIDENCE

Weighting According to a Rating Scheme (Scheme Given)

## RATING SCHEME FOR THE STRENGTH OF THE EVIDENCE

### Guideline Appraisal

A quality appraisal was conducted on these five guidelines using an adapted tool.

### Levels of Evidence

The definitions of the strength of evidence supporting the recommendations used to develop this guideline were adapted from the Agency for Health Care Policy and Research (AHCPR).

Strength of Evidence A: Requires at least one randomized controlled trial as part of the body of literature of overall quality and consistency addressing the specific recommendations.

Strength of Evidence B: Requires availability of well conducted clinical studies but no randomized clinical trials on the topic of recommendations.

Strength of Evidence C: Requires evidence from expert committee reports or opinions and/or clinical experience of respected authorities. Indicates absence of directly applicable studies of good quality.

## METHODS USED TO ANALYZE THE EVIDENCE

Systematic Review

## DESCRIPTION OF THE METHODS USED TO ANALYZE THE EVIDENCE

Not applicable

## METHODS USED TO FORMULATE THE RECOMMENDATIONS

Expert Consensus

## DESCRIPTION OF METHODS USED TO FORMULATE THE RECOMMENDATIONS

In June of 2000, a panel of nurses with expertise in clinical practice and research in the assessment and management of pressure ulcers, from both institutional and community settings, convened under the auspices of the Registered Nurses Association of Ontario (RNAO). The first task of the panel was to identify and review existing clinical practice guidelines in order to build on the current understanding of pressure ulcer assessment and management, and to reach consensus on the scope of the guideline. The guideline development panel

proceeded to develop a synthesis table of the recommendations from the selected clinical practice guidelines. The panel adapted practice recommendations within these guidelines in order to ensure their applicability to best nursing practice. Systematic and narrative reviews of the literature were used in the development of practice recommendations that could not be extracted from existing guidelines. Panel consensus was obtained for each recommendation.

## RATING SCHEME FOR THE STRENGTH OF THE RECOMMENDATIONS

Not applicable

## COST ANALYSIS

A formal cost analysis was not performed and published cost analyses were not reviewed.

## METHOD OF GUIDELINE VALIDATION

Clinical Validation-Pilot Testing  
External Peer Review

## DESCRIPTION OF METHOD OF GUIDELINE VALIDATION

A draft guideline was submitted to a set of external stakeholders for review. The feedback received was reviewed and incorporated into the final draft guideline. This draft nursing best practice guideline was pilot implemented in selected practice settings in Ontario. Pilot implementation practice settings were identified through a "request for proposal" process conducted by the Registered Nurses Association of Ontario (RNAO). The implementation phase was evaluated, and the guideline was further refined taking into consideration the pilot site feedback and evaluation results, as well as current literature.

# RECOMMENDATIONS

## MAJOR RECOMMENDATIONS

Definitions for the strength of evidence (Levels A-C) are repeated at the end of the Major Recommendations.

### Practice Recommendations

#### History and Physical Examination

##### Recommendation 1

Conduct a history and focused physical assessment.

(Strength of Evidence = C)

#### Psychosocial Assessment

## Recommendation 2

Conduct a psychosocial assessment to determine the client's ability and motivation to comprehend and adhere to the treatment program.

(Strength of Evidence = C)

## Recommendation 3

Assess quality of life

(Strength of Evidence = C)

## Pressure Ulcer Assessment

## Recommendation 4

To plan treatment and evaluate its effects, assess the pressure ulcer(s) initially for:

- Stage/Depth
- Location
- Size (mm, cm)
- Odour
- Sinus tracts/Undermining/Tunneling
- Exudate
- Appearance of the wound bed
- Condition of the surrounding skin (periwound) and wound edges

(Strength of Evidence = C)

## Recommendation 5

Reassess ulcers at least weekly to determine the adequacy of the treatment plan.

(Strength of Evidence = C)

## Recommendation 6

Vascular assessment (e.g. Ankle/Brachial Pressure Index, Toe Pressure) is recommended for ulcers in lower extremities to rule out vascular compromise.

(Strength of Evidence = C)

## Nutrition Assessment and Management

## Recommendation 7

Ensure adequate dietary intake to prevent malnutrition or replace existing deficiencies to the extent that this is compatible with the individual's wishes.

(Strength of Evidence = B)

#### Recommendation 8

Prevent clinical nutrient deficiencies by ensuring that the patient is provided with optimal nutritional care through one or more of the following:

(Strength of Evidence = C)

- Consultation with a registered dietitian for assessment
- Consultation with a speech language pathologist for swallowing assessment
- A varied, balanced diet to meet clinical needs for healing and co-existing diseases e.g. renal failure and diabetes
- Nutritional supplements if needed
- Multivitamin and mineral preparations
- Enteral tube feeding
- Parenteral nutrition

(Strength of Evidence = B)

- Ongoing monitoring of nutritional intake, laboratory data and anthropometric data

#### Pain

#### Recommendation 9

Assess all patients for pain related to the pressure ulcer or its treatment.

(Strength of Evidence = C)

#### Recommendation 10

Assess location, frequency and intensity of pain to determine the presence of underlying disease, the exposure of nerve endings, efficacy of local wound care and psychological need.

(Strength of Evidence = B)

#### Positioning and Support Surfaces

#### Recommendation 11

Refer patients at RISK to appropriate interdisciplinary team members (Occupational Therapist, Physiotherapist, Enterostomal Therapist, etc) with expertise in seating. Postural alignment, distribution of weight, balance, stability, and pressure relief when positioning sitting individuals must be considered. Ensure support surfaces are used appropriately and are properly maintained.

(Strength of Evidence = C)

#### Recommendation 12

Assess all patients with EXISTING PRESSURE ULCERS to determine their risk for developing additional pressure ulcers using the "Braden Scale for Predicting Pressure Sore Risk." If the client remains at risk, use a pressure-reducing surface.

(Strength of Evidence = C)

#### Recommendation 13

If the patient remains at risk for other pressure ulcers, a high specification foam mattress instead of a standard hospital mattress should be used to prevent pressure ulcers in moderate to high risk patients.

(Strength of Evidence = A)

#### Recommendation 14

Use a static support surface if the patient can assume a variety of positions without bearing weight on a pressure ulcer and without "bottoming out."

(Strength of Evidence = B)

#### Recommendation 15

Use a dynamic support surface if:

- The patient cannot assume a variety of positions without bearing weight on a pressure ulcer
- The patient fully compresses the static support surface
- The pressure ulcer does not show evidence of healing

(Strength of Evidence = B)

#### Recommendation 16

Use pressure relief for clients in the Operating Room to reduce the incidence of pressure ulcers post operatively.

(Strength of Evidence = B)

#### Recommendation 17

Obtain a seating assessment if a client has a pressure ulcer on a sitting surface that requires relief from pressure or repositioning.

(Strength of Evidence = C)

#### Recommendation 18



A client who has a pressure ulcer on a seating surface should avoid sitting. If pressure on the ulcer can be relieved, limited sitting may be allowed.

(Strength of Evidence = C)

#### Ulcer Management: Debridement

##### Recommendation 19

Select the method of debridement most appropriate to:

- The client's condition and goals of treatment
- Type, quantity and location of necrotic tissue
- Depth and amount of fluid

(Strength of Evidence = C)

##### Recommendation 20

Sharp debridement should be used if there is urgent need for debridement, as with advancing cellulitis or sepsis.

(Strength of Evidence = C)

##### Recommendation 21

Vascular assessment (e.g. Ankle/Brachial Pressure Index, Toe Pressure) is recommended for ulcers in lower extremities prior to debridement to rule out vascular compromise.

(Strength of Evidence = C)

##### Recommendation 22

Foot ulcers with dry eschar need not be debrided if they do not have edema, erythema, fluctuance, or drainage. Assess these wounds daily to monitor for pressure ulcer complications that would require debridement.

(Strength of Evidence = C)

##### Recommendation 23

Prevent or manage pain associated with debridement. Consult with a member of the health care team with expertise in pain management, when appropriate.

(Strength of Evidence = C)

#### Wound Cleansing

##### Recommendation 24

Do not use skin cleansers or antiseptic agents (e.g. povidine iodine, iodophor, sodium hypochlorite solution, hydrogen peroxide, acetic acid) to clean ulcer wounds.

(Strength of Evidence = B)

#### Recommendation 25

Use normal saline, Ringer's lactate, sterile water or non-cytotoxic wound cleansers to clean ulcer wounds.

(Strength of Evidence = C)

#### Recommendation 26

Fluid used for cleansing should be warmed at least to room temperature.

(Strength of Evidence = B)

#### Recommendation 27

Cleanse wounds at each dressing change.

(Strength of Evidence = C)

#### Recommendation 28

To reduce surface bacteria and tissue trauma, the wound should be gently irrigated with 100 to 150 milliliters of solution.

(Strength of Evidence = C)

#### Recommendation 29

Use enough irrigation pressure to enhance wound cleansing without causing trauma to the wound bed. Safe and effective ulcer irrigation pressures range from 4 to 15 psi. Pressure of 4 to 15 psi is achieved by using:

- 35 milliliter syringe with a 19 gauge angiocath
- Single-use 100 milliliter saline squeeze bottle

(Strength of Evidence = B)

#### Dressings

#### Recommendation 30

Moisture-retentive dressings optimize the local wound environment and promote healing.

(Strength of Evidence = A)

#### Recommendation 31

Consider the following criteria for interactive dressings when selecting a dressing:

- Maintains a moist environment
- Controls wound exudate, keeping the wound bed moist and the surrounding intact skin dry
- Provides thermal insulation and wound temperature stability
- Protects from contamination of outside micro-organisms
- Maintains its integrity and does not leave fibers or foreign substances within the wound
- Does not cause trauma to wound bed on removal
- Is simple to handle, and is economical of costs and time

(Strength of Evidence = B/C)

#### Recommendation 32

Consider caregiver time when selecting a dressing.

(Strength of Evidence = A)

#### Recommendation 33

When selecting a dressing consider:

- Etiology of the wound
- Client's general health status, goals of care and environment
- Site of the wound
- Size of the wound, including depth and undermining
- A dressing that will loosely fill wound cavity
- Exudate: type and amount
- Risk of infection
- Type of tissue involved
- Phase of the wound healing process
- Frequency of the dressing change
- Comfort and cosmetic appearance
- Where and by whom the dressing will be changed
- Dressing availability

(Strength of Evidence = C)

#### Recommendation 34

Monitor dressings applied near the anus, since they are difficult to keep intact. Consider use of special sacral-shaped dressings.

(Strength of Evidence = B)

## Adjunctive Therapies

### Recommendation 35

Refer to physiotherapy for a course of treatment with electrotherapy for Stage III and IV pressure ulcers that have proved unresponsive to conventional therapy. Electrical stimulation may also be useful for recalcitrant Stage II ulcers.

(Strength of Evidence = A)

### Recommendation 36

Chronic pressure ulcers may be treated by:

- Electrical stimulation (Strength of Evidence = A)
- Vacuum assisted closure and normothermic therapies (Strength of Evidence = B)
- Therapeutic ultrasound (Strength of Evidence = B)
- Ultraviolet light (Strength of Evidence = B)
- Pulsed electromagnetic fields (Strength of Evidence = B)
- Growth factors and skin equivalents (Strength of Evidence = C)

## Colonization and Infection

### Recommendation 37

The treatment of infection is managed by wound cleansing, systemic antibiotics, and debridement as needed.

(Strength of Evidence = A)

### Recommendation 38

Protect pressure ulcers from sources of contamination, e.g., fecal matter.

(Strength of Evidence = B)

### Recommendation 39

Follow Body Substance Precautions (BSP) or an equivalent system appropriate for the health care setting and the client's condition when treating pressure ulcers.

(Strength of Evidence = C)

### Recommendation 40

Medical management may include initiating a two-week trial of topical antibiotics for clean pressure ulcers that are not healing or are continuing to produce exudate after two to four weeks of optimal patient care. The antibiotic should be effective against gram-negative, gram-positive and anaerobic organisms.

(Strength of Evidence = A)

#### Recommendation 41

Medical management may include appropriate systemic antibiotic therapy for patients with bacteremia, sepsis, advancing cellulitis, or osteomyelitis.

(Strength of Evidence = A)

#### Recommendation 42

Use sterile instruments to debride pressure ulcers.

(Strength of Evidence = C)

#### Recommendation 43

To obtain wound culture, cleanse wound with normal saline first. Swab wound bed, not eschar, exudate or edges.

(Strength of Evidence = C)

#### Recommendation 44

The use of cytotoxic antiseptics to reduce bacteria in wound tissue is not recommended.

(Strength of Evidence = B)

#### Operative Repair of Pressure Ulcers

#### Recommendation 45

Possible candidates for operative repair are medically stable, adequately nourished, are able to tolerate operative blood loss and postoperative immobility. Quality of life, patient preferences, treatment goals, risk of recurrence, and expected rehabilitative outcome are additional considerations.

(Strength of Evidence = C)

#### Discharge/Transfer of Care Arrangements

#### Recommendation 46

Clients moving between care settings should have the following information provided:

- Risk factors identified
- Details of pressure points and skin condition prior to transfer
- Need for pressure reducing/relieving equipment

- Need for pressure relieving mattresses, seating, special transfer equipment
- Details of healed ulcers
- Stage, site and size of existing ulcers
- History of ulcers, previous treatments and dressings (generic) used
- Type of dressing currently used and frequency of change
- Any allergies to dressing products
- Need for on-going nutritional support

(Strength of Evidence = C)

#### Recommendation 47

Use the Registered Nurses Association of Ontario (RNAO) best practice guideline "Risk Assessment and Prevention of Pressure Ulcers" (2001).

(Strength of Evidence = C)

### Educational Recommendations

#### Recommendation 48

Design, develop, and implement educational programs that reflect a continuum of care. The program should begin with a structured, comprehensive, and organized approach to prevention and should culminate in effective treatment protocols that promote healing as well as prevent recurrence.

(Strength of Evidence = C)

#### Recommendation 49

Develop educational programs that target appropriate health care providers, patients, family members, and caregivers. Present information at an appropriate level for the target audience, in order to maximize retention and facilitate a carry over into practice.

(Strength of Evidence = C)

#### Recommendation 50

Involve the patient and caregiver, when possible, in pressure ulcer treatment and prevention strategies and options. Include information on pain, discomfort, possible outcomes, and duration of treatment, if known. Other areas of education may include patient information regarding appropriate support surfaces, as well as roles of various health professionals. Collaborate with patient, family and caregivers to design and implement a plan for pressure ulcer prevention and treatment.

(Strength of Evidence = C)

#### Recommendation 51

Include the following information when developing an educational program on the treatment of pressure ulcers:

- Role of the interdisciplinary team
- Etiology and pathology
- Risk factors
- Individualized program of skin care, quality of life and pain management
- Uniform terminology for stages of tissue damage based on specific classifications
- Need for accurate, consistent and uniform assessment, description and documentation of the extent of tissue damage
- Principles of wound healing
- Principles of cleansing, debridement and infection control
- Principles of nutritional support with regard to tissue integrity
- Product selection (i.e. support surfaces, dressings, topical antibiotics, antimicrobials)
- Principles of postoperative care including positioning and support surfaces
- Effects or influence of the physical and mechanical environment on the pressure ulcer, and strategies for management
- Mechanisms for accurate documentation and monitoring of pertinent data, including treatment interventions and healing progress
- Principles of patient education related to prevention to reduce recurrence

(Strength of Evidence = C)

#### Recommendation 52

Knowledge and skills related to the assessment and management of pressure ulcers require updating on an ongoing basis. Organizations should provide opportunities for professional development related to the best practice guideline and support its use in daily practice.

(Strength of Evidence = C)

#### Organization & Policy Recommendations

#### Recommendation 53

Guidelines are more likely to be effective if they take into account local circumstances and are disseminated by an active ongoing educational and training program.

(Strength of Evidence = C)

#### Recommendation 54

Practice settings need a policy with respect to providing and requesting advance notice when transferring or admitting clients between practice settings when special resources (e.g., surfaces) are required.

(Strength of Evidence = C)

#### Recommendation 55

Practice settings must ensure that resources are available to clients and staff, e.g. appropriate moisturizers, barriers, dressings, documentation systems, access to equipment and clinical experts, etc.

(Strength of Evidence = C)

#### Recommendation 56

Practice settings need a policy that requires product vendors to be registered as a regulated health care professional if they provide assessment and/or recommendations on any aspect of pressure ulcer related practice.

(Strength of Evidence = C)

#### Recommendation 57

Practice settings need an interdisciplinary team of interested and knowledgeable persons to address quality improvement in pressure ulcer management. This team requires representation across departments and programs.

(Strength of Evidence = C)

#### Recommendation 58

Nursing best practice guidelines can be successfully implemented only where there are adequate planning, resources, organizational and administrative support, as well as the appropriate facilitation. Organizations may wish to develop a plan for implementation that includes:

- An assessment of organizational readiness and barriers to education  
  
Involvement of all members (whether in a direct or indirect supportive function) who will contribute to the implementation process
- Dedication of a qualified individual to provide the support needed for the education and implementation process
- Ongoing opportunities for discussion and education to reinforce the importance of best practices
- Opportunities for reflection on personal and organizational experience in implementing guidelines

In this regard, RNAO (through a panel of nurses, researchers and administrators) has developed the "Toolkit: Implementation of Clinical Practice Guidelines" based on available evidence, theoretical perspectives and consensus. The Toolkit is recommended for guiding the implementation of the RNAO nursing best practice guideline on Assessment and Management of Stage I to IV Pressure Ulcers.

(Strength of Evidence = C)



## Definitions:

### Levels of Evidence

Strength of Evidence A: Requires at least one randomized controlled trial as part of the body of literature of overall quality and consistency addressing the specific recommendations.

Strength of Evidence B: Requires availability of well conducted clinical studies but no randomized clinical trials on the topic of recommendations.

Strength of Evidence C: Requires evidence from expert committee reports or opinions and/or clinical experience of respected authorities. Indicates absence of directly applicable studies of good quality.

### CLINICAL ALGORITHM(S)

None provided

## EVIDENCE SUPPORTING THE RECOMMENDATIONS

### TYPE OF EVIDENCE SUPPORTING THE RECOMMENDATIONS

The type of supporting evidence is identified and graded for each recommendation (see "Major Recommendations").

## BENEFITS/HARMS OF IMPLEMENTING THE GUIDELINE RECOMMENDATIONS

### POTENTIAL BENEFITS

- Guideline implementation is intended to help nurses in a variety of health care settings with the assessment and management of stage I to stage IV pressure ulcers in Canadian clients.
- Appropriate evaluation and management of pressure ulcers may help promote wound healing, prevent further skin breakdown, and decrease the incidence and severity of pressure ulcers.
- Nurses, other health care professionals and administrators who are leading and facilitating practice changes will find this document valuable for the development of policies, procedures, protocols, educational programs, assessment and documentation tools, etc.

### POTENTIAL HARMS

- Some commercial wound cleansers contain ingredients that may be toxic to new tissue.
- Care must be taken in choosing and using wound dressings because of the potential for outside contamination, leaving residual fibers or foreign substances within the wound, and traumatizing the wound bed during removal.

- Sharp debridement with the use of a scalpel, scissors, or other sharp instrument is a high-risk procedure that should be undertaken with caution. It causes bleeding, may require anesthetic, and has the potential to cause injury to nervous or other viable tissue.
- Mechanical debridement is a slow process, can be painful and should be discontinued when necrotic tissue has been removed. Wet-to-dry dressings in particular are nonselective in that they remove both viable and necrotic tissue, and are potentially damaging to granulation and epithelial tissue. It is important to ensure that appropriate and adequate pain management is incorporated into the plan of care when this method is utilized.
- Autolytic debridement is slow, and should not be utilized on infected ulcers. It may be prudent to avoid all occlusive dressings if anaerobic infection is suspected or cultured, as occlusive dressings are thought to promote an anaerobic environment.

## QUALIFYING STATEMENTS

### QUALIFYING STATEMENTS

- These best practice guidelines are related only to nursing practice and not intended to take into account fiscal efficiencies. These guidelines are not binding for nurses and their use should be flexible to accommodate client/family wishes and local circumstances. They neither constitute a liability or discharge from liability. While every effort has been made to ensure the accuracy of the contents at the time of publication, neither the authors nor Registered Nurses Association of Ontario (RNAO) give any guarantee as to the accuracy of the information contained in them nor accept any liability, with respect to loss, damage, injury or expense arising from any such errors or omission in the contents of this work. Any reference throughout the document to specific pharmaceutical products as examples does not imply endorsement of any of these products.
- Although the guideline is written for the nurse, wound healing is an interdisciplinary endeavour. Many settings have formalized interdisciplinary teams and the guideline development panel strongly supports this structure. Collaborative assessment and treatment planning with the client is essential. The recommendations made are not binding for nurses and should accommodate patient/family wishes and local circumstances.
- It is acknowledged that the individual competency of nurses varies between nurses and across categories of nursing professionals (registered practical nurses [RPNs] and registered nurses [RNs]) and is based on the knowledge, skills, attitudes and judgment enhanced over time by experience and education. It is expected that individual nurses will perform only those aspects of pressure ulcer assessment and management for which they have appropriate education and experience. Further, it is expected that nurses, both RPNs and RNs, will seek consultation in instances where the patient's care needs surpass the individual nurse's ability to act independently. It is acknowledged that effective patient care depends on a coordinated interdisciplinary approach incorporating ongoing communication between health professionals and patients, ever mindful of the personal preferences and unique needs of each individual patient.
- Pressure ulcer management includes the principles of pressure ulcer prevention. For this reason, the development panel strongly encourages the

implementation of this guideline in conjunction with the RNAO Best Practice Guideline Risk Assessment and Prevention of Pressure Ulcers (2001).

## IMPLEMENTATION OF THE GUIDELINE

### DESCRIPTION OF IMPLEMENTATION STRATEGY

#### Toolkit: Implementing Clinical Practice Guidelines

Nursing best practice guidelines can be successfully implemented only where there are adequate planning, resources, organizational and administrative support, as well as the appropriate facilitation. In this regard, Registered Nurses Association of Ontario (RNAO) (through a panel of nurses, researchers and administrators) has developed The Toolkit for Implementing Clinical Practice Guidelines, based on available evidence, theoretical perspectives and consensus. The Toolkit is recommended for guiding the implementation of any clinical practice guideline in a health care organization.

The "Toolkit" provides step by step directions to individuals and groups involved in planning, coordinating, and facilitating the guideline implementation. Specifically, the "Toolkit" addresses the following key steps:

1. Identifying a well-developed, evidence-based clinical practice guideline
2. Identification, assessment and engagement of stakeholders
3. Assessment of environmental readiness for guideline implementation
4. Identifying and planning evidence-based implementation strategies
5. Planning and implementing evaluation
6. Identifying and securing required resources for implementation

Implementing guidelines in practice that result in successful practice changes and positive clinical impact is a complex undertaking. The "Toolkit" is one key resource for managing this process.

For specific recommendations regarding implementation of this guideline, refer to the "Major Recommendations" field.

#### Evaluation and Monitoring

Organizations implementing the recommendations in this nursing best practice guideline are advised to consider how the implementation and its impact will be monitored and evaluated. A table found in the original guideline document, based on the framework outlined in the RNAO Toolkit: Implementation of clinical practice guidelines (2002), illustrates some suggested indicators for monitoring and evaluation.

## INSTITUTE OF MEDICINE (IOM) NATIONAL HEALTHCARE QUALITY REPORT CATEGORIES

### IOM CARE NEED

Getting Better  
Living with Illness

## IOM DOMAIN

Effectiveness  
Safety

## IDENTIFYING INFORMATION AND AVAILABILITY

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### ADAPTATION

The guideline has been adapted and modified from the following guidelines and related updates:

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#### Updates

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### DATE RELEASED

2002 Aug

## GUIDELINE DEVELOPER(S)

Registered Nurses Association of Ontario - Professional Association

## SOURCE(S) OF FUNDING

Funding was provided by the Ontario Ministry of Health and Long Term Care.

## GUIDELINE COMMITTEE

Not stated

## COMPOSITION OF GROUP THAT AUTHORED THE GUIDELINE

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#### FINANCIAL DISCLOSURES/CONFLICTS OF INTEREST

The Registered Nurses Association of Ontario (RNAO) received funding from the Ministry of Health and Long-Term Care (MOHLTC). This guideline was developed by a panel of nurses and researchers convened by the RNAO and conducting its work independent of any bias or influence from the MOHLTC.

#### GUIDELINE STATUS

This is the current release of the guideline.

#### GUIDELINE AVAILABILITY

Electronic copies: Available in Portable Document Format (PDF) from the [Registered Nurses Association of Ontario \(RNAO\) Web site](#).

Print copies: Available from the Registered Nurses Association of Ontario (RNAO), Nursing Best Practice Guidelines, 438 University Avenue, Suite 1600, Toronto, Ontario, M5G 2K8; Fax: (416) 599-1926; Order forms available on the [RNAO Web site](#).

## AVAILABILITY OF COMPANION DOCUMENTS

The following is available:

- Toolkit: implementation of clinical practice guidelines. Toronto (ON): Registered Nurses Association of Ontario (RNAO); 2002 Jan. 91 p.

Electronic copies: Available in Portable Document Format (PDF) from the [RNAO Web site](#)

Print copies: Available from the Registered Nurses Association of Ontario (RNAO), Nursing Best Practice Guidelines, 438 University Avenue, Suite 1600, Toronto, Ontario, M5G 2K8; Fax: (416) 599-1926; Order forms available on the [RNAO Web site](#).

## PATIENT RESOURCES

The following is available:

- Health information fact sheet. Taking the pressure off: preventing pressure ulcers. Toronto (ON): Registered Nurses Association of Ontario (RNAO); 2003 Nov. 2 p.

Electronic copies: Available in Portable Document Format (PDF) from the [Registered Nurses Association of Ontario \(RNAO\) Web site](#).

Print copies: Available from the Registered Nurses Association of Ontario (RNAO), Nursing Best Practice Guidelines, 438 University Avenue, Suite 1600, Toronto, Ontario, M5G 2K8; Fax: (416) 599-1926; Order forms available on the [RNAO Web site](#).

Please note: This patient information is intended to provide health professionals with information to share with their patients to help them better understand their health and their diagnosed disorders. By providing access to this patient information, it is not the intention of NGC to provide specific medical advice for particular patients. Rather we urge patients and their representatives to review this material and then to consult with a licensed health professional for evaluation of treatment options suitable for them as well as for diagnosis and answers to their personal medical questions. This patient information has been derived and prepared from a guideline for health care professionals included on NGC by the authors or publishers of that original guideline. The patient information is not reviewed by NGC to establish whether or not it accurately reflects the original guideline's content.

## NGC STATUS

This NGC summary was completed by ECRI on December 17, 2003. The information was verified by the guideline developer on January 16, 2004.

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